United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Schell Field Office
HC33 Box 33500 (702 N. Industrial Way)
Ely, Nevada 89301-9408
http://www.blm.gov/nv/st/en/fo/ely_field_office.html

March 12, 2010

In Reply Refer To:
6513 (NVL02000)

Dear Interested Public:

In cooperation with Nevada Department of Wildlife (NDOW) and the Mule Deer Foundation, the Ely District BLM, Schell Field Office is proposing to construct three wildlife water developments in the Antelope Range of Eastern Nevada. The proposed project will improve availability and distribution of water sources in habitat identified as water limiting for large-game animals (i.e. mule deer and elk). This area has sufficient food and cover, but provides limited seasonal habitat due to a lack of available water. The addition of water developments will increase the available usable habitat for large-game animals and other wildlife.

The final Environmental Assessment discussing the proposed action and any potentially significant impacts to the quality of the human environment, Finding of No Significant Impact, and Decision Record are enclosed. The BLM provided the preliminary Environmental Assessment to the public for a 22 day comment period on January 29, 2010. One comment supporting the project was received. The final Environmental Assessment is posted on the Ely District web site: http://www.blm.gov/nv/st/en/fo/ely_field_office.html.

For more information please contact Nancy Williams, Wildlife Biologist, at 775-289-1838 or Nancy_M_Williams@blm.gov.

Sincerely,

\s\Mary D'Aversa
Mary D'Aversa
Field Manager
Schell Field Office

U.S. Department of the Interior
Bureau of Land Management

Finding of No Significant Impact and Decision Record
DOI-BLM-NV-L020-2010-0014-EA
March 1, 2010

Antelope Range Wildlife Water Development

Location: Antelope Range, Eastern Nevada

T.23N., R.67E., Sec.8, SW
T.23N., R.67E., Sec.4, NWSW
T.24N., R.67E., Sec.8, SWSW
M.D.B.M.

U.S. Department of the Interior
Bureau of Land Management
Ely District Office
Phone: 775-289-1838
Fax: 775-289-1910

BLM

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
ELY DISTRICT OFFICE

INTRODUCTION

I have reviewed Environmental Assessment (EA) DOI-BLM-NV-L020-2010-0014-EA, for the Antelope Range Wildlife Water Development project, dated March 1, 2010, taking into consideration the project design specifications.

I have also considered the Council on Environmental Quality's (CEQ) criteria for significance (40 CFR 1508.27), both with regard to the context and the intensity of impacts described in the EA:

Context:

The Bureau of Land Management (BLM) has the authority to protect and provide habitat for wildlife under the Federal Land Policy and Management Act of 1976 (43 United States Code 1701 et seq.).

Intensity:

1. *Impacts that may be both beneficial and adverse:*
   No significant negative impacts were noted. The proposed action will result in improved economics and tourism of the surrounding communities through hunting and wildlife viewing opportunities. Any negative effects caused by the proposed action are thought to be short term and temporary. Negative effects such as damaged roads are required to be repaired as part of the special stipulations that the permit holder agrees to. The spread of invasive, non-native plant species will be minimal and not significant as identified by the weeds risk assessment completed for the proposed action.

2. *The degree to which the Proposed Action affects public health and safety:*
   The proposed action will not have significant negative effects to public health and safety. Coordination with state agencies and stipulations to minimize any negative effects to the public health are agreed upon by the permit holder.

3. *Unique characteristics of the geographic area such as proximity to historical or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas:*

   The project area is representative of the Great Basin ecosystem. No significant impacts are anticipated from the proposed action to floodplains, wetlands, and riparian areas; wilderness values, ACECs, and wild and scenic rivers; visual resource management; cultural, paleontological, and historical resource values; prime or unique farmlands; environmental justice; water quality (drinking/ground); Native American religious concerns; or migratory birds.

4. *The degree to which the effects on the quality of the human environment are likely to be highly controversial:*
   The methods used to implement the proposed action are well understood and accepted as methods used to meet resource and management objectives and are not considered highly controversial.

5. *The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks:*
   The proposed action and its potential effects on the human environment are not uncertain and do not involve unknown risks. Similar actions have been implemented very successfully in the past.

6. *The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration:*
   The proposed action would not establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration. All future similar events would be subject to the same environmental assessment standards and independent decision making.

7. *Whether the action is related to other actions with individually insignificant, but cumulatively significant impacts:*
   The environmental assessment analyzed potential cumulative impacts in relation to other past, present and reasonably foreseeable actions within the treatment area and supports the conclusion the proposed wildlife water developments is not related to other actions with individually insignificant but cumulatively significant impacts.

8. *The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing on the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historic resources:*
   The proposed action will not cause the loss or destruction of significant scientific, cultural or historical resources. A cultural needs assessment was completed to determine the threat the proposed action will pose to cultural and historical resources. Mitigation actions identified ensure that cultural or historical resources will not be damaged.

9. *The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973:*
   The location of the proposed action is not within threatened or endangered species habitat.

10. *Whether the action threatens a violation of federal, state, local or tribal law or requirements imposed for the protection of the environment:*
    The proposed action will not violate or threaten to violate Federal, State, or local or tribal laws or requirements imposed for the protection of the environment.

FINDING OF NO SIGNIFICANT IMPACT

I have determined that the proposed action will not significantly affect the quality of the human environment and the preparation of an Environmental Impact Statement (EIS) is not required.

\s\Mary D'Aversa
Mary D'Aversa
Field Manager
Schell Field Office

3/5/2010
Date

In Reply Refer To: 6513 (NVL02000)

D E C I S I O N

Antelope Range Wildlife Water Development	:	Decision Record
	:	
	:	DOI-BLM-NV-L020-2010-0014 EA
	:	

I have reviewed the application, the Environmental Assessment, and have made a Finding of No Significant Impact (FONSI) for the Antelope Range Wildlife Water Development Project. Based on that review and the record as a whole, I approve the action.

RATIONALE:

1) The Proposed Action is in conformance with the Ely District Record of Decision and Approved Resource Management Plan signed in August of 2008. Section I of the Environmental Assessment documents the conformance review.

2) The Proposed Action is consistent with all other federal, state, local, and tribal policies and plans to the maximum extent possible.

3) Action will improve available habitat and water resources for wildlife and alleviate large animal impact pressure on surrounding water sources.

PUBLIC INVOLVEMENT:

The Preliminary Environmental Assessment was made available to the public on January 29, 2010 and comments were accepted through February 22, 2010. Comments received during the comment period are addressed in Section VII of the environmental assessment.

The proposed project was also discussed at the Ely District Tribal Coordination Meeting on December 16, 2009. No concerns were identified.

APPEALS:

This decision may be appealed to the Interior Board of Land Appeals (Board), U. S. Department of the Interior (DOI) Office of Hearings and Appeals, in accordance with the regulations contained in 43 CFR, Part 4. The appellant has the burden of showing that the decision appealed from is in error. If an appeal is taken, a notice of appeal must be filed at the Bureau of Land Management at the above address within 30 days of either of receipt of the decision if served a copy of the document, or otherwise within 30 days of the date of the decision. If sent by United States Postal Service, the notice of appeal must be sent to the following address:

Bureau of Land Management
Ely District Office
HC 33 Box 33500
Ely, NV 89301.

The appeal may include a statement of reasons at the time the notice of appeal is filed, or the statement of reasons may be filed within 30 days of filing this appeal. At the same time the original documents are filed with this office, copies of the notice of appeal, statement of reasons, and all supporting documentation also must be sent to the U. S. DOI Solicitor at the following address:

Regional Solicitor, Pacific Southwest Region
U.S. Department of the Interior
2800 Cottage Way, Room E-2753
Sacramento, CA 95825-1890

If a statement of reasons is filed separately from the notice of appeal, it also must be sent to the following location within 30 days after the notice of appeal was filed:

Interior Board of Land Appeals
Office of Hearings and Appeals
4015 Wilson Boulevard
Arlington, VA 22203

Approved by:

\s\Mary D'Aversa
Mary D'Aversa
Field Manager
Schell Field Office

3/12/2010
Date

U.S. Department of the Interior
Bureau of Land Management

Environmental Assessment
DOI-BLM-NV-L020-2010-0014-EA
March 1, 2010

Antelope Range Wildlife Water Development

Location: Antelope Range, Eastern Nevada

T.23N., R.67E., Sec.8, SW
T.23N., R.67E., Sec 4, NWSW
T.24N., R.67E., Sec 8, SWSW
M.D.B.M.

U.S. Department of the Interior
Bureau of Land Management
Ely District Office
Phone: 775-289-1800
Fax: 775-289-1910

BLM

NATIONAL SYSTEM OF PUBLIC LANDS

I. BACKGROUND INFORMATION

Introduction

In the past, the Bureau of Land Management (BLM), in cooperation with the Nevada Department of Wildlife (NDOW), constructed wildlife water developments throughout Nevada to improve the distribution and subsequent use of habitat by game and wildlife species.

Wildlife water developments hold many benefits for elk, mule deer, pronghorn antelope, and bighorn sheep as well as for many non-game species. Marshal et al. (2006) found that although large game usage of habitat near water developments does increase, vegetation in the form of forage quality does not significantly decrease. A greater diversity of non-game than game animals in fact visit such developments (AFGD 2004, O'Brien et al 2006: see Krausman et al. 2006). The conservation benefits of wildlife water developments offset or mitigate disturbances to the habitat of these species and do not disturb or otherwise negatively affect the project area.

Purpose and Need

The purpose of the proposed action is to improve availability and distribution of dependable waters sources in habitat identified as water limiting for big-game animals (i.e. mule deer and elk). These areas have sufficient food and cover, but provide limited seasonal habitat due to a lack of available water. There are many reasons for this lack of available water. For example, human developments, encroachment of Pinyon-Juniper (PJ) woodlands, and large scale wildfires have decreased the amount and availability of suitable habitat in some areas. In other areas, free flowing springs historically used by these species have been developed and piped for support of livestock operations. These proposed wildlife water developments would primarily benefit mule deer and elk.

Relationship to Planning

The proposed action is in conformance with the following Federal, State, and local laws, regulations, policies, and plans:

Ely Proposed Resource Management Plan/Final Environmental Impact Statement (2007) and Ely District Record of Decision and Approved Resource Management Plan (2008).

- *Goal:* "Provide habitat for wildlife (i.e., forage, water, cover, and space) and fisheries that is of sufficient quality and quantity to support productive and diverse wildlife and fish populations, in a manner consistent with the principles of multi-use management, and to sustain the ecological, economic, and social values necessary for all species".
- *Objective:* "To use wildlife water developments, both natural and artificial, to improve the condition of wildlife habitat, and to use artificial wildlife water developments to mitigate impacts to wildlife species from loss of natural water sources or loss of habitat."

Parameter: Wildlife Water Developments

- WL-19: "Identify areas of suitable wildlife habitat that are water limited in coordination with the Nevada Department of Wildlife and interested public (i.e. elk management technical review teams, sportsmen groups, etc.)."

- WL-20: "Use the criteria listed below to identify artificial wildlife water developments:
    - To mitigate for loss of natural water sources;
    - To mitigate for habitat loss or habitat fragmentation;
    - To reduce inter-specific competition between wildlife, livestock, and wild horses;
    - To reduce inter-specific competition between wildlife species; and
    - In suitable wildlife habitat that is water limited."

White Pine County Public Land Use Policy Plan (revised July 2007): "Identify habitat needs for wildlife species, such as adequate forage, water, cover, etc., and provide for those needs so as to, in time, attain appropriate population levels compatible with other multiple uses as determined by public involvement."

White Pine County Elk Management Plan (revised 2007)**:** "Water developments and habitat improvement projects could enhance the elk population through much of the range" and identified as "Priority Rating = High" the project and sites chosen for big game water developments in the Antelope Range.

Executive Order 13443, signed in August of 2007: President Bush directed the Department of Interior to "Manage wildlife and wildlife habitats on public lands in a manner that expands and enhances hunting opportunities."

Issues

During an internal interdisciplinary team scoping meeting (November 30, 2009) potential issues were brought up concerning noxious and invasive weeds and wild horses.

II. DESCRIPTION OF THE PROPOSED ACTION AND NO ACTION ALTERNATIVE

Proposed Action

BLM proposes to partner with NDOW and Mule Deer Foundation (MDF) on the construction of three new wildlife water developments (Table 1) beginning summer 2010. The sites would be accessed using existing two-track roads; directly to two of the sites, a short one-pass up the draw to the other (Figure 1). No permanent new roads or trails would be created. A rubber-tired backhoe would be used to level the areas where the storage tanks and apron would be located. Pickup trucks with trailers and an ATV would be used to haul tools. Volunteers would walk from the existing roads to the sites. Approximately one day would be needed to prepare each site using a backhoe and an estimated two days per site would be needed to install the wildlife water development.

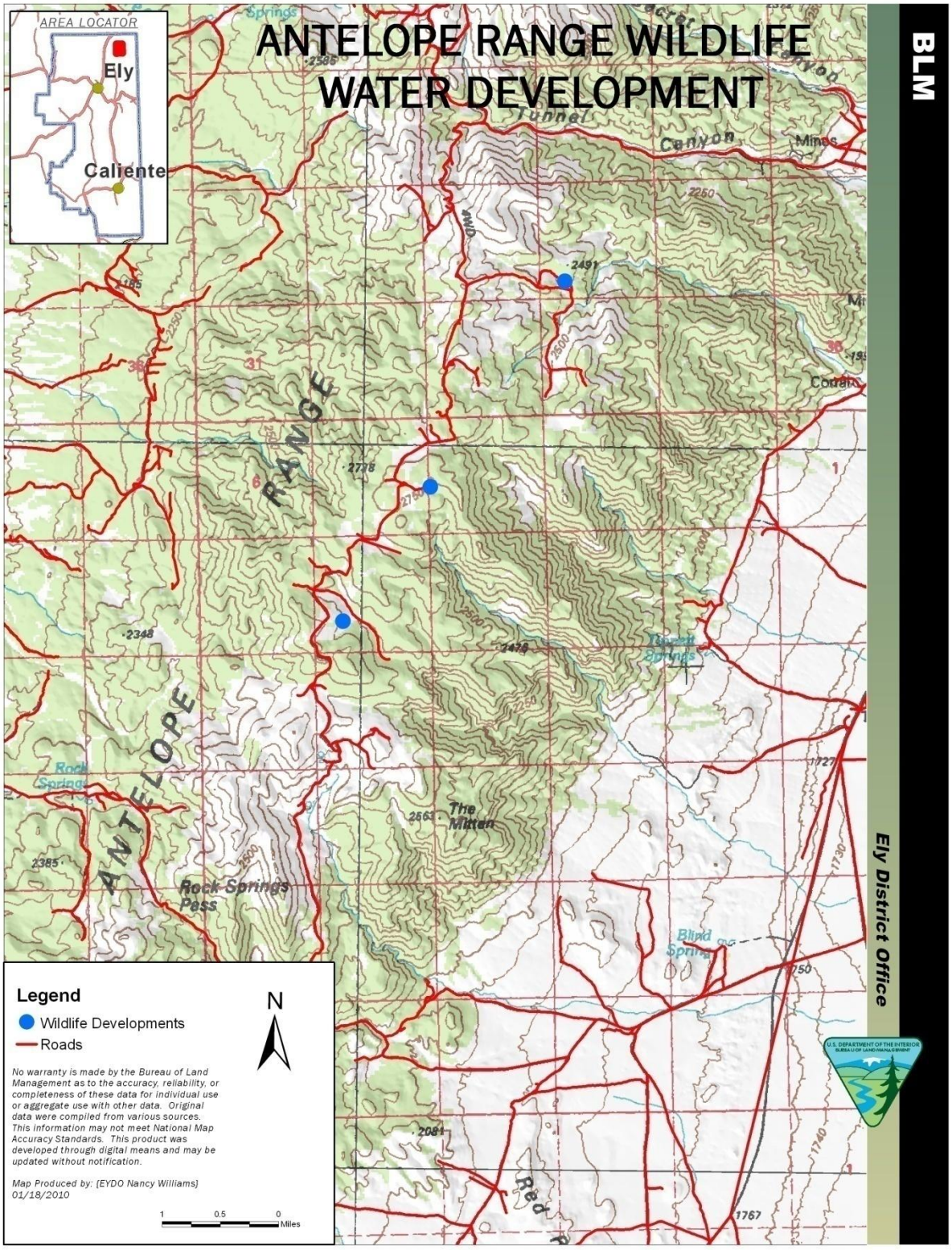


Figure 1. Map of proposed wildlife water developments in the Antelope Range.

Table 1. Proposed wildlife watering facility sites (UTM Coordinates, NAD83)

Name	Northing	Easting	Tanks
Antelope Range 1	719529	4417535	2
Antelope Range 2	720849	4419619	2
Antelope Range 3	722706	4422306	2

Wildlife water developments would be designed for elk and deer, using one water collection apron and two plastic storage tanks (1800 gallons each) with built-in drinkers for each. To prevent damage due to heavy snow loading, the plastic 25' x 100' apron would be constructed on the ground. Two Johnson filtration screens would be used to filter out dirt and debris. The water would flow through 2" polyethylene pipes to the brown polyethylene storage tanks partially buried downslope of the aprons. The pipe would be buried between the apron and storage tanks. The tanks would be plumbed together and situated to allow for access at all drinkers. The system eliminates the need for a float valve system. Excess water would overflow through the drinker.

A four-strand, barbed wire fence would be constructed approximately 10' wider than the outer edges of the apron to prevent damage to the apron from livestock, wildlife, or wild horses. A pipe rail fence with two 1-5/8" steel rails at 24" and 42" above the ground would be installed around the storage tanks and drinker. This would prevent livestock and wild horses from accessing the site. The apron, steel fencing, and any exposed pipe would be left to rust and corrode thus visually integrating the project into the surrounding environment.

The installation of each wildlife water development would result in less than one acre of total disturbance. Access to the site for subsequent annual inspections and routine maintenance would be on foot. Wildlife water developments and associated fencing will avoid existing obvious horse trails.

Design Features

The following Standard Operating Procedures would be adhered to:

1. The proposed action would comply with the *BLM Migratory Bird Treaty Act-Interim Management Guidance* (Instructional Memorandum 2008-050).

2. A cultural survey of each treatment area would be conducted and appropriate site documentation completed prior to project implementation. National Register eligible cultural resources would be avoided or impacts would be mitigated as necessary before treatments are implemented.

3. Access would be via existing two-track roads. No permanent new roads or trails would be created. Some off-road travel could occur; however, off-road travel would be limited to that necessary to safely and practically achieve resource objectives.

4. The BLM Ely District Weed Management Standard Operating Procedures and recommendations contained in the Weed Risk Assessment (Appendix I) for the project would be followed:

a. Prior to the entry of vehicles and equipment to a project area, areas of concern would be identified and flagged in the field by a weed scientist or qualified biologist. The flagging would alert personnel and participants to avoid areas of concern. These sites would be recorded using global positioning systems or other Ely District Office approved equipment and provided to the District Office Weed Coordinator or designated contact person.

b. Prior to entering public lands, the contractor, operator, or permit holder would provide information and training regarding noxious weed management and identification to all personnel who would be affiliated with the implementation and maintenance phases of the project. The importance of preventing the spread of weeds to uninfested areas and importance of controlling existing populations of weeds would be explained.

c. To eliminate the transport of vehicle-borne weed seeds, roots, or rhizomes all vehicles and heavy equipment used for the completion, maintenance, inspection, or monitoring of ground disturbing activities; for emergency fire suppression; or for authorized off-road driving would be free of soil and debris capable of transporting weed propagules. All such vehicles and equipment would be cleaned with power or high pressure equipment prior to entering or leaving the work site or project area. Vehicles used for emergency fire suppression would be cleaned as a part of check-in and demobilization procedures. Cleaning efforts would concentrate on tracks, feet and tires, and on the undercarriage. Special emphasis would be applied to axels, frames, cross members, motor mounts, on and underneath steps, running boards, and front bumper/brush guard assemblies. Vehicle cabs would be swept out and refuse would be disposed of in waste receptacles. Cleaning sites would be recorded using global positioning systems or other mutually acceptable equipment and provided to the District Office Weed Coordinator or designated contact person.

d. Removal and disturbance of vegetation would be kept to a minimum through construction site management (e.g. using previously disturbed areas, limiting equipment/materials storage and staging area sites, etc.).

5. A project inspector would be assigned to the project to insure it is constructed according to specifications. The project would be inspected and maintained annually by BLM and/or NDOW personnel, as well as volunteers. The sites would be checked for noxious weeds annually for at least three seasons, or until native vegetation has recovered enough to lessen the chance of infestation.

6. Equipment would not be allowed to operate when the ground is unsuitable (i.e. excessively muddy or when saturated with moisture) or in terrain too steep to minimize ground impacts.

7. Removal of vegetation would be kept to the minimum necessary for construction.

At the end of each project, NDOW would spread the remainder of the vegetation that was removed and place it along bare ground and disturbed areas to provide soil shade and cover.

8. Location sites shall be maintained in a sanitary condition at all times; litter shall be disposed of promptly at an authorized solid waste disposal site. Failure to remove litter may result in assessment of damages by the BLM Authorized Officer. "Litter" means all discarded matter including but not limited to trash, garbage, refuse, ashes and equipment. Site must be maintained and left in a clean and safe condition.

9. NDOW is responsible for clean-up and assumes liability for any and all releases of hazardous substances and or oil (more than one quart) disposed on public land as defined in the National Oil and Hazardous Substances Contingency Plan (40 CFR 300). NDOW will immediately notify the BLM Authorized Officer of any and all releases of hazardous substances and or oil (more than one quart) on public land.

10. Project area cleanup would be accomplished by removing all refuse to an approved sanitary landfill.

11. NDOW would flag the exclusion fence using white flagging to decrease the potential for wildlife and wild horse collisions or entanglements.

No Action Alternative

Under the no action alternative, these wildlife water developments would not be constructed. Wildlife would continue to need available water in order to increase their distribution and abundance throughout the project area.

III. DESCRIPTION OF THE AFFECTED ENVIRONMENT

The areas affected by the Proposed Action are located in White Pine County, Nevada. The sites are on the high elevation eastern front of the Antelope Range. The topography in the area is typical of that found in the southern Great Basin.

A. Resources/Concerns Analyzed

Potential impacts to the following resources/concerns were evaluated in accordance with criteria listed in the H-1790-1 NEPA Handbook (2008) page 41, to determine if detailed analysis was required. Consideration of some of these items is to ensure compliance with laws, statutes or Executive Orders that impose certain requirements upon all Federal actions. Other items are relevant to the management of public lands in general, and to the Ely District BLM in particular.

Table 1. Resources/Concerns

Resource/Concern	Issue(s) Analyzed? (Y/N)	Rationale for Dismissal from Detailed Analysis or Issue(s) Requiring Detailed Analysis
Air Quality	N	Air quality throughout the area is generally good, but disturbance of the soil surface during construction could cause dust and airborne particles to increase for a very brief period of time. Detailed analysis is not required
Areas of Critical Environmental Concern (ACEC)	N	No ACEC's are located near the proposed project area.
Cultural Resources	N	In accordance with the *Archeological Resources Protection Act of 1979*, "any material remains of past human life or activities which are of archaeological interest" shall be assessed and secured "for the present and future benefits of the American People". All ground disturbing activities will be subject to Section 106 review and, if needed, SHPO consultation as per BLM Nevada's implementation of the Protocol for cultural resources. Analysis of the *Cultural Resource Sensitivity Model for the Bureau of Land Management, Ely District* (Drews and Ingbar, 2004) indicated that the proposed project locations are predominately within a moderate to high cultural sensitivity zones. Additionally, a cultural Needs Assessment has been completed and there have been no previously conducted inventories within the proposed locations. All proposed activities and disturbances must avoid cultural resources. Prior to proposed ground disturbing activities, all project areas will be inventoried to identify possible cultural resources. If the cultural resources are discovered at or near proposed water developments, the proposed project will be moved to a distance of 100 meters or greater from the resources.
Forest Health	N	The proposed project would not affect forest health.
Farmlands (Prime or Unique)	N	No prime or unique farmlands exist within the proposed project area.
Floodplains	N	No floodplains are present within the proposed

		project area.
Migratory Birds	N	Proposed action would be planned to occur outside the Migratory Bird nesting season. Should implementation take place within the migratory bird nesting season, the area would be cleared prior to work. Impact to migratory birds is negligible.
Rangeland Standards and Guidelines	N	Rangeland would not be affected due to the small scale of the proposed project. No detailed analysis required.
Native American Religious Concern	N	No concerns were raised regarding the proposed action.
Noxious and Invasive Weeds	Y	Any ground disturbing activity has the potential to aid in the spread of noxious and non-native invasive weeds.
Threatened and Endangered Species	N	No threatened or endangered species are present within the project area.
Special Status Animal Species (other than those listed or proposed by the FWS as Threatened or Endangered)	N	No state or BLM listed sensitive species are known to be present within the area of influence of the proposed wildlife water development sites. It is highly unlikely that unknown individuals would be either directly or indirectly affected by the proposed action.
Special Status Plant Species (other than those listed or proposed by the FWS as Threatened or Endangered)	N	No special status plant species are known to occur within the proposed project area and would not be affected by the proposed action.
Fish and Wildlife	N	The area surrounding the wildlife water development sites provides yearlong habitat for elk and summer habitat for mule deer. The area also provides habitat for coyotes, rabbits, sagebrush obligate birds, and other small mammals and reptiles. The project, as proposed, should greatly benefit many species of wildlife, especially big game. No further analysis required.
Wastes (Hazardous and Solid)	N	No known hazardous or solid wastes exist within the project area, nor would any be introduced in larger than negligible quantities.
Water Resources (Water Rights)	N	There are no affects to water resources.
Water Quality (Drinking and Ground)	N	No affects to water quality are expected. The proposed water developments do not utilize springs or ephemeral water sources. The wildlife water developments may relieve

		wildlife pressure on springs within the Antelope Range.
Wetlands/Riparian	N	No wetlands or riparian areas are located within or near the project area. The proposed water developments do not utilize springs or ephemeral water sources. The proposed action should relieve some wildlife pressure by on springs within the Antelope Range.
Environmental Justice	N	No environmental justice issues are present.
Mineral Resources	N	No mineral resources will be affected.
Wild Horses	Y	Although the proposed water developments do not utilize springs or ephemeral water sources available to all animals, they have the potential to facilitate an increase in the number of wild ungulates on the landscape. This could lead to competition for available forage, but likely only to the degree to which dietary overlap exists between wild horses and other wildlife species. Fencing near horse trails could cause entanglement.
Wilderness/WSA	N	No action would occur within wilderness or wilderness study areas.
Wild and Scenic Rivers	N	Not present.
Vegetative Resources	N	Due to the very small amount of disturbance it is highly unlikely that the vegetative resources would be affected. It would remove less than one acre per site of potential forage available to livestock and other grazing/browsing species.
Livestock Grazing	N	The proposed project is located within the Tippett Allotment, the Antelope Use Area. It is highly unlikely that the proposed action would greatly decrease range productivity, diversity, or vigor. It may facilitate an increase in the number of wild ungulates on the landscape. This could lead to minimal competition for available forage, but likely only to the degree to which dietary overlap occurs between livestock (sheep) and other species of wildlife.
Soils/Watershed	N	Soils would likely be affected locally where they would be excavated and graded for tank interment and apron placement, as well as minor effects due to single use cross country travel from existing roads to proposed sites. No soils would be removed from the area.
Recreation	N	Dispersed recreation is the primary recreational use in the area of influence surrounding the proposed wildlife water development sites.

		Such recreation in this area includes: large and small game hunting, wildlife observation and photography, hiking and general off highway vehicle use. The proposed sites are fairly well concealed due to topography and vegetation.
Visual Resources	N	The proposed wildlife water developments would be visible from only two track roads. The proposed action is located in a VRM Class 3.

B. Affected Environment

Noxious and Invasive Weeds

The BLM defines a weed as a non-native plant that disrupts or has the potential to disrupt or alter the natural ecosystem function, composition and diversity of the site it occupies. A weeds presence deteriorates the health of the site, it makes efficient use of natural resources difficult, and it may interfere with management objectives for that site. It is an invasive species that requires a concerted effort (manpower and resources) to remove from its current location, if it can be removed at all. "Noxious" weeds refer to those plant species which have been legally designated as unwanted or undesirable. This includes national, state and county or local designations.

No field surveys were conducted for this project. Instead the Ely District weed inventory data was consulted for this project. There are currently no documented weed infestations in the project areas. The following species are found along roads and drainages leading to the Antelope Range project area:

Acroptilon repens	Russian knapweed
Carduus nutans	Musk thistle
Cirsium arvense	Canada thistle
Cirsium vulgare	Bull thistle
Lepidium draba	Hoary cress
Lepidium latifolium	Tall whitetop
Onopordum acanthium	Scotch thistle
Tamarix spp.	Salt cedar

While not officially inventoried the following weeds probably occur in or around the allotment: cheatgrass (*Bromus tectorum*), halogeton (*Halogeton glomeratus*), and Russian thistle (*Salsola kali*). This area was last inventoried for noxious weed in 2003.

Wild Horses

All three proposed wildlife water development sites occur in the Antelope Horse Management Area (HMA). Currently there are an estimated 372 wild horses on the Antelope HMA, which contains more than 398,971 acres and has an Appropriate Management Level (AML) of 324 horses.

IV. ENVIRONMENTAL CONSEQUENCES

Noxious and Invasive Weeds

Proposed Action

A Noxious & Invasive Weeds Risk Assessment was completed for this project (Appendix I). The ground disturbance created by the excavation of the sites could lead to the introduction of new weed infestations to the project area. If new weed infestations establish within the project area this could have an adverse impact to those native plant communities since the areas are currently considered to be weed-free. Also, any increase of cheatgrass could alter the fire regime in the area. With the BLM Ely District Weed Management Standard Operating Procedures included in the proposed action the impact to weeds should be lowered.

No Action Alternative
There would be no change to noxious weeds and invasive plants.

Wild horses

Proposed Action
In many areas the completion for forage around spring sources would be reduced by wildlife being able to move to other areas for water availability. Wildlife water developments do not utilize springs, ephemeral or free water sources available to all animals. These developments collect snow melt and rain water and are designed specifically for wildlife. They fence out livestock and wild horses to increase the opportunity for wildlife species to utilize habitat that they otherwise would be unable to occupy. Constructing the proposed wildlife water development fencing away from any horse trails should avoid entanglement.

In addition, some temporary disturbance to normal behavior and range use patterns may occur during construction of the wildlife water development.

No Action Alternative
No impacts to wild horses would occur.

V. Cumulative Impacts

The purpose of the cumulative analysis in the EA is to evaluate the significance of the Proposed Action's contributions to cumulative impacts. A cumulative impact is defined under federal regulations as follows:

> "...the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7)."

According to the 1997 CEQ Handbook *Guidelines for Assessing and Documenting Cumulative Impacts*, the analysis can be focused on those issues and resource values identified during scoping that are of major importance. The Cumulative Effects Study Area (CESA) for the cumulative effects analysis on noxious and invasive weeds and horses is defined by the Antelope Mountain Range.

Past Actions

In the past 25 years, there have been over 100 small game wildlife watering developments and more than 76 big game wildlife watering developments constructed throughout the Ely District. Of the 76 big game wildlife watering developments, seven were constructed primarily for mule deer, twelve for elk, twenty-seven for pronghorn antelope, and thirty for desert bighorn sheep. The construction of wildlife water developments have allowed for the release of chukar into several areas of the Ely District, and the reintroduction of desert bighorn sheep into the Delamar Mountains, the Hiko Range, and the South Egan Ranges. These actions have allowed small game and big game species to expand their distribution into otherwise suitable unoccupied habitat and increase in numbers.

Present Actions

The area of the Antelope Range over which the proposed wildlife water developments would be installed, is used for several different purposes. Most of the area is grazed by domestic livestock (sheep). In addition, much of the area also receives use by wild horses, mule deer, and elk. Recreation activities within the surrounding area include dispersed recreation, camping, hunting, and OHV use.

Reasonably Foreseeable Future Actions

A new resource management plan (RMP) is currently being developed for the Ely Field Office BLM area. The final EIS for the RMP was published in November 2007. According to the new RMP, resources management would occur by watershed.

The reasonably foreseeable future actions (RFFAs) within the project area include the following: right of ways for wind energy development; recreational use; hazardous fuels reduction and wildland fire.

Noxious and Invasive Weeds

Noxious weeds may increase for a time due to any of the aforementioned RFFAs. Most future actions may increase weed distribution and abundance during the construction phase. The proposed action would disturb a very small area separate from the other project areas, thereby not increasing the overall cumulative impact to noxious weeds and invasive plants. If followed, the standard operating procedures, the mitigation measures found in this EA, as well as the plans for revegetation of disturbed areas would greatly reduce the spread of noxious weeds and invasive plants.

Wild Horse

Wild horses may be displaced or they may experience a disruption of normal behavioral patterns during the construction, implementation, or operation of some of the developments within the project area. Wildland fire and energy development fields may disrupt contiguous habitats causing fragmentation and reduced forage availability. The proposed action would disturb a very small area separate from other RFFA project areas, thereby not increasing the overall cumulative impact to wild horses.

VI. PROPOSED MITIGATING MEASURES

Appropriate mitigation measures have been included as part of the proposed action (see Appendix 1).

VII. CONSULTATION AND COORDINATION

A preliminary environmental assessment was posted to the Ely District website for public viewing. Letters advising interested parties of the action and preliminary EA availability were mailed on February 5, 2010. Comments were accepted on the preliminary EA through February 22, 2010. One comment was received from Southern Nevada Water Authority in support of the Antelope Range Wildlife Water Development project stating it will improve available habitat and water resources for wildlife and alleviate stress on riparian areas.

On December 16, 2009 the Antelope Range Wildlife Water Development proposal was presented at a Tribal coordination meeting at the Ely BLM District Office. No concerns were identified during this meeting.

Internal District Review

Mindy Seal	Noxious and Invasive Weeds
Brett Covlin	Rangeland Management/Vegetation/Livestock Grazing
Zach Peterson	Environmental Coordination, Forest Resources, Air Quality
Shawn Gibson	Cultural Resources
Elvis Wall	Native American Religious Concerns
Nancy Williams	Wildlife/T&E/Migratory Birds/Special Status Species
David Jacobson	Wilderness, ACEC
Brenda Linnell	Lands
Melanie Peterson	Hazardous & Solid Wastes
Ben Noyes	Wild Horse and Burro
Elizabeth Townley	Visual Resources Management, Recreation
David Davis	Minerals
Mark D'Aversa	Water Quality, Floodplains

Federal and State Officials and Agencies

Steve Foree	Nevada Division of Wildlife
Curt Baughman	Nevada Division of Wildlife
Craig Stevenson	Nevada Division of Wildlife

References

Arizona Fish and Game Department (AFGD). 2004. Technical Guidance Bulletin No. 8. December, 2004.

Krausman, PR, SS Rosenstock, and JW Cain III. 2006. Developed waters for wildlife: science, perception, values and controversy. Wildlife Society Bulletin 34 (3): 563-569.

Marshal, JP, PR Krausman, VC Bleich, SS Rosenstock, and WB Ballard. 2006. Wildlife Society Bulletin 34 (3): 620-626.

O'Brien, CS, RB Waddell, SS Rosenstock, and MJ Rabe. 2006. Wildlife use of water catchments in southwest Arizona. Wildlife Society Bulletin 34(3): 582-591.

Appendix I

RISK ASSESSMENT FOR NOXIOUS & INVASIVE WEEDS

Antelope Range Wildlife Watering Development
White Pine County, Nevada

On July 21st, 2008 a Noxious & Invasive Weed Risk Assessment was completed for the three wildlife watering development projects along the Antelope Range. Each wildlife water development would be less than 1 acre total disturbance and include one plastic apron (25' x 100') and two 1800 gallon storage tanks with built-in drinkers. A rubber-tired backhoe would be used to level the areas where the storage tanks and apron would be located and to install the storage tanks and pipe, located from apron to tanks. To prevent damage from livestock, wildlife, and wild horses, a barbed wire fence would be constructed around the apron and a pipe rail style fence around the storage tanks and drinker. The Mule Deer Foundation volunteers would access sites with pickup trucks using existing two-track roads. Approximately one day would be needed to prepare the site using a backhoe and one to two days would be needed to install each wildlife water development and fence.

No field surveys were conducted for this project. Instead the Ely District weed inventory data was consulted for this project. There are currently no documented weed infestations in the project areas. The following species are found along roads and drainages leading to the Antelope Range project area:

Acroptilon repens	Russian knapweed
Carduus nutans	Musk thistle
Cirsium arvense	Canada thistle
Cirsium vulgare	Bull thistle
Lepidium draba	Hoary cress
Lepidium latifolium	Tall whitetop
Onopordum acanthium	Scotch thistle
Tamarix spp.	Salt cedar

While not officially inventoried the following weeds probably occur in or around the allotment: cheatgrass (*Bromus tectorum*), halogeton (*Halogeton glomeratus*), and Russian thistle (*Salsola kali*). This area was last inventoried for noxious weed in 2003.

Factor 1 assesses likelihood of noxious/invasive weed species spreading to the project area.

None (0)	Noxious/invasive weed species are not located within or adjacent to the project area. Project activity is not likely to result in the establishment of noxious/invasive weed species in the project area.
Low (1-3)	Noxious/invasive weed species are present in the areas adjacent to but not within the project area. Project activities can be implemented and prevent the spread of noxious/invasive weeds into the project area.
Moderate (4-7)	Noxious/invasive weed species located immediately adjacent to or within the project area. Project activities are likely to result in some areas becoming infested with noxious/invasive weed species even when preventative management actions are followed. Control measures are essential to prevent the spread of noxious/invasive weeds within the project area.
High (8-10)	Heavy infestations of noxious/invasive weeds are located within or immediately adjacent to the project area. Project activities, even with preventative management actions, are likely to result in the establishment and spread of noxious/invasive weeds on disturbed sites throughout much of

	the project area.

For this project, the factor rates as Moderate (4) at the present time. The ground disturbance created by the excavation of the site could lead to the introduction of new weed infestations to the project area.

Factor 2 assesses consequences of noxious/invasive weed establishment in the project area.

Low to Nonexistent (1-3)	None. No cumulative effects expected.
Moderate (4-7)	Possible adverse effects on site and possible expansion of infestation within the project area. Cumulative effects on native plant communities are likely but limited.
High (8-10)	Obvious adverse effects within the project area and probable expansion of noxious/invasive weed infestations to areas outside the project area. Adverse cumulative effects on native plant communities are probable.

This project rates as High (8) at the present time. If new weed infestations establish within the project area this could have an adverse impact those native plant communities since the areas are currently considered to be weed-free. Also, any increase of cheatgrass could alter the fire regime in the area.

The Risk Rating is obtained by multiplying Factor 1 by Factor 2.

None (0)	Proceed as planned.
Low (1-10)	Proceed as planned. Initiate control treatment on noxious/invasive weed populations that get established in the area.
Moderate (11-49)	Develop preventative management measures for the proposed project to reduce the risk of introduction of spread of noxious/invasive weeds into the area. Preventative management measures should include modifying the project to include seeding the area to occupy disturbed sites with desirable species. Monitor the area for at least 3 consecutive years and provide for control of newly established populations of noxious/invasive weeds and follow-up treatment for previously treated infestations.
High (50-100)	Project must be modified to reduce risk level through preventative management measures, including seeding with desirable species to occupy disturbed site and controlling existing infestations of noxious/invasive weeds prior to project activity. Project must provide at least 5 consecutive years of monitoring. Projects must also provide for control of newly established populations of noxious/invasive weeds and follow-up treatment for previously treated infestations.

For this project, the Risk Rating is Moderate (32). This indicates that the project can proceed as planned as long as the following measures are followed:

- Prior to entering public lands, the contractor, operator, or permit holder will provide information and training regarding noxious weed management and identification to all personnel who will be affiliated with the implementation and maintenance phases of the project. The importance of preventing the spread of weeds to uninfested areas and importance of controlling existing populations of weeds will be explained.
- To eliminate the transport of vehicle-borne weed seeds, roots, or rhizomes all vehicles and heavy equipment used for the completion, maintenance, inspection, or monitoring of ground disturbing activities; or for authorized off-road driving will be free of soil and debris capable of transporting weed propagules. All such vehicles and equipment will be cleaned with power or high pressure equipment prior to entering or leaving the work site or project area. Cleaning efforts will concentrate on tracks, feet and tires, and on the undercarriage. Special emphasis will be applied to axels, frames, cross members, motor mounts, on and underneath steps, running boards, and front bumper/brush guard assemblies. Vehicle cabs will be swept out and

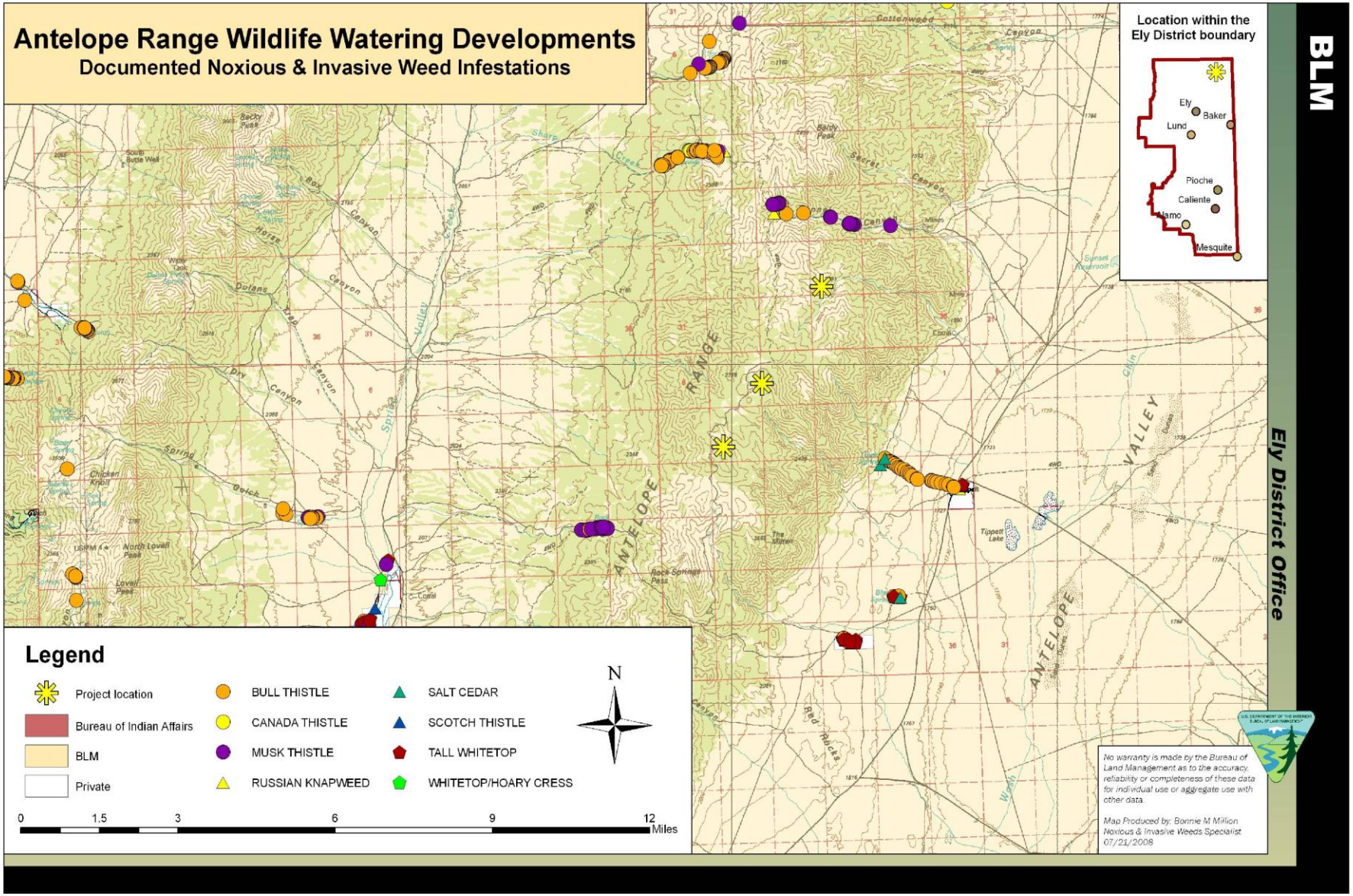
refuse will be disposed of in waste receptacles. Cleaning sites will be recorded using global positioning systems or other mutually acceptable equipment and provided to the Field Office Weed Coordinator or designated contact person.

- To eliminate the introduction of noxious weed seeds, roots, or rhizomes all interim and final seed mixes, hay, straw, hay/straw, or other organic products used for reclamation or stabilization activities, feed, bedding will be certified free of plant species listed on the Nevada noxious weed list or specifically identified by the BLM Ely Field Office.
- Removal and disturbance of vegetation would be kept to a minimum through construction site management (e.g. using previously disturbed areas and existing easements, limiting equipment/materials storage and staging area sites, etc.)
- Reclamation would normally be accomplished with native seeds only. These would be representative of the indigenous species present in the adjacent habitat. Rationale for potential seeding with selected nonnative species would be documented. Possible exceptions would include use of non-native species for a temporary cover crop to out-compete weeds. Where large acreages are burned by fires and seeding is required for erosion control, all native species could be cost prohibitive and/or unavailable. In all cases, seed mixes would be approves by the BLM Authorized Officer prior to planting.

Reviewed by: \s\Mindy Seal 1/19/2010

Mindy Seal
Ely District Noxious & Invasive Weeds
Coordinator

Date


Antelope Range Wildlife Watering Developments
Documented Noxious & Invasive Weed Infestations
Location within the Ely District boundary
Ely
Baker
Lund
Pioche
Caliente
Mesquite
BLM
Ely District Office
Legend
Project location
Bureau of Indian Affairs
BLM
Private
BULL THISTLE
CANADA THISTLE
MUSK THISTLE
RUSSIAN KNAPWEED
SALT CEDAR
SCOTCH THISTLE
TALL WHITETOP
WHITETOP/HOARY CRESS
N
0
1.5
3
6
9
12
Miles
No warranty is made by the Bureau of Land Management as to the accuracy, reliability or completeness of these data for individual use or aggregate use with other data.
Map Produced by: Bonnie M Million
Noxious & Invasive Weeds Specialist
07/21/2008
ANTELOPE RANGE
ANTELOPE VALLEY
Cottonwood Canyon
Baldy Peak
Secret Canyon
Dutans Canyon
Dry Canyon
Spring Valley
Quick Spring
Chicken Knoll
North Lowell Peak
Lowell Peak
Rock Springs Pass
Tippet Lake
Red Rocks
Sunset Reservoir